

**RV Ocean Veritas Data Summary
Deepwater Horizon Oil Spill
Cruise 6/28/2010**

Review Date 6/29/10

Summary:

This sampling report presents data collected from the RV Ocean Veritas for the period of 6/28/2010. The RV Ocean Veritas will alternate with the Brooks McCall in the collection of subsurface data associated with the Deepwater Horizon oil spill. Based on the limited extent of the plume yesterday, the sampling plan for today was to return to station OV063, occupied on 6/26/2010, to see if concentration there were still moderate, and then try to determine the plume's extent. Stations occupied during this reporting period include OV073, OV074 and OV075. A total of 3 CTD casts were completed on 6/28/2010.

The Ocean Veritas provided the following definition to provide terminology on how subsurface oil is referred:

Oil Plume: concentrations of hydrocarbons (above background) detected in the water column via fluorometry and LISST particle analysis that appears to be part of a larger pattern of dissolved oil, naturally dispersed oil and/or chemically dispersed oil.

The CTD array data showed fluorescence signals at Stations OV073 and OV075. No fluorescence signals were detected at Station OV074.

A total of 13,195 gallons of subsurface dispersant were used on 6/28/2010. The average injection rate was approximately 9.2 gallons/minute.

The results for Rototox samples OV068, OV069 and OV072 collected on 6/27/2010 did not indicate any significant mortality and control survivability was good. Rototox samples were collected from Station OV073 on 6/28/2010. Results will be available tomorrow.

CTD Fluorometry & Dissolved Oxygen:

Station OV073, which is at the same location as OV063, was located 2 km southwest of the wellhead. There was a weak fluorescence signal at 1190 meters. No drop in dissolved oxygen was associated with the fluorescence signal. Station OV074, located 2 km south of the wellhead, did not detect a fluorescence signal. No abnormalities in dissolved oxygen were observed. Station OV075 was located approximately 1.4 km southwest of the wellhead. A fluorescence signal was detected from 1050-1200 meters. Three distinct peaks were observed in this range at 1050 meters, 1110 meters and 1180 meters. No water samples were obtained at Station OV075 due to the CTD cable failure.

Based on today's results, the Ocean Veritas reported that the plume may be reduced in size, but is still located to the southwest. Dissolved oxygen data collected from the XTech Probe ranged between 3.86 and 6.47 mg/l.

LISST Data:

LISST data was collected at the three sampled stations. A total of thirty-five (35) LISST samples were collected today. The LISST data indicated that small droplet concentration was low throughout the entire water column for Stations OV073 and OV074. Due to the CTD malfunction at OV075, only the bucket sample (depth of 0.5 meters) was collected and analyzed.

Toxicity Testing (Rototox Assay) (data collected from 6/28):

The results for Rototox samples OV068, OV069 and OV072 collected on 6/27/2010 did not indicate any significant mortality and control survivability was good. Rototox samples were collected from Station OV073 on 6/28/2010. Results will be available tomorrow.

Chemical Analyses (TPH and VOCs) (data collected from 6/28):

Twenty (20) samples were collected for TPH analysis and twenty (20) samples were collected for VOC analysis. No data were provided for review at this time due to laboratory lag time.

Problems/Operation issues:

During the first CTD cast, the power cable shorted out. After the cable was spliced, sampling resumed. The CTD functioned properly for two stations; however, at the third station, the downcast recorded properly, but communication with the unit was lost when retrieval began. No samples were taken because the bottles could not be fired and it was too late in the day to attempt a cable repair again. The Ocean Veritas departed the area for Port Fourchon.

As discussed in yesterday's report, the Entrix bottle numbers are being reported, which are different than the standard coding. NOAA NRDA samples are not listed in the spreadsheet but are on file with the data manager, pending resolution of the sample nomenclature and labeling issue.

The Ocean Veritas also re-sent data from 6/27/2010. The re-submission included the LISST data that had been discussed in their Status Report for 6/27/2010.

Mississippi Canyon 252, Gulf of Mexico

R/V Ocean Veritas

Date Produced: June 28, 2010

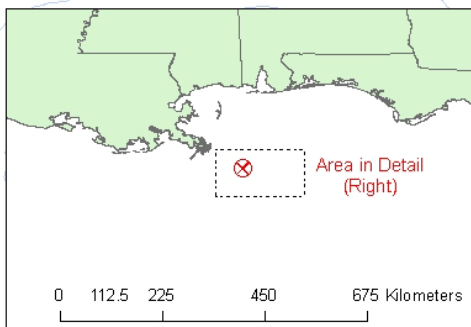
Sampling Effort

Created by: NOAA

Cruise 06

Subsurface Plume Detected Using CDOM Fluorometer

- Strong
- Moderate
- Weak
- No plume detected
- ⊗ Well



R/V Ocean Veritas Sampling Stations

June 26	June 27	June 28
OV063	OV068	OV073
OV064	OV069/070	OV074
OV065	OV071	OV075
OV066	OV072	
OV067		

Scale: 1: 120,000

0 1.5 3 6 Kilometers